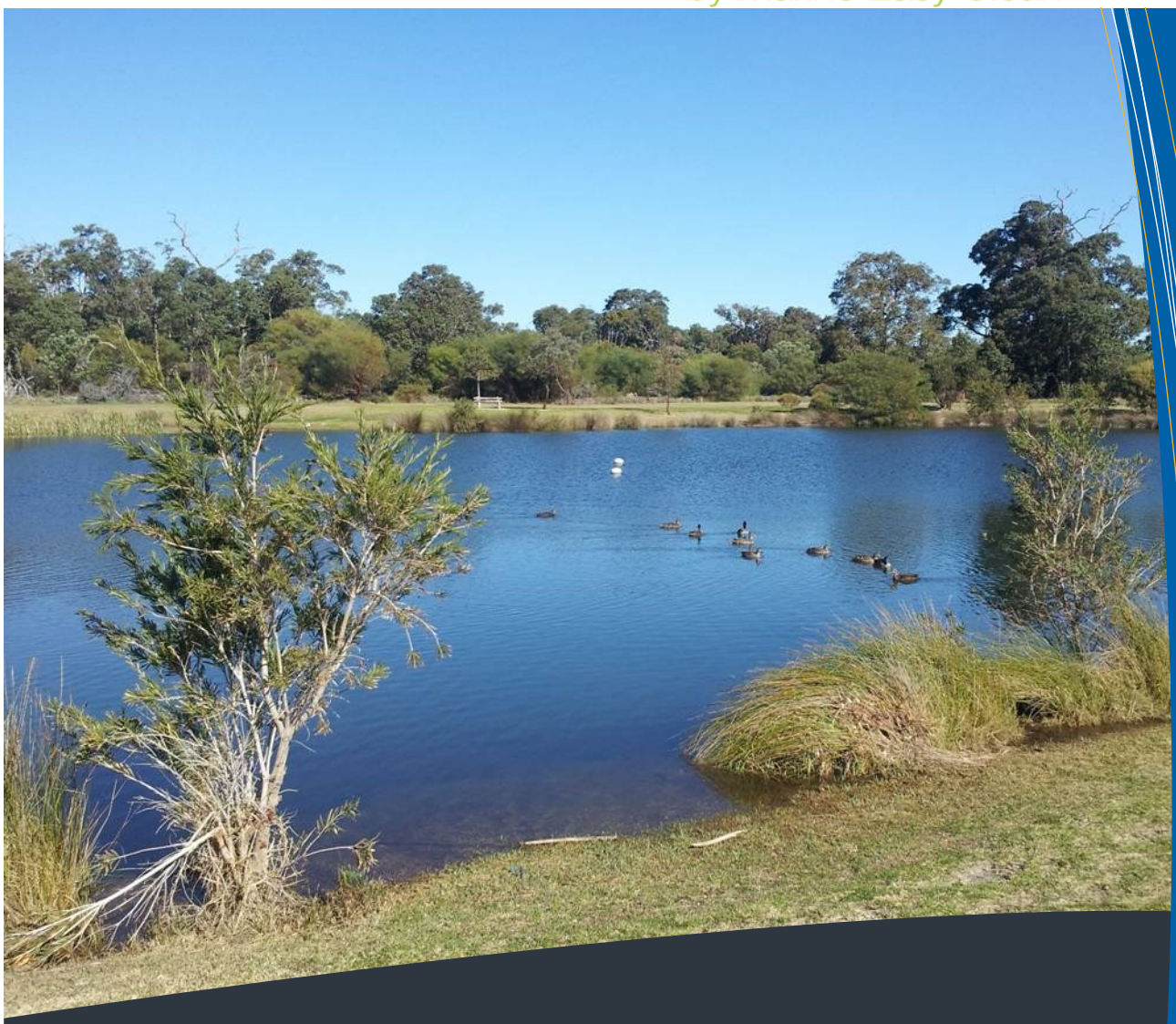
the Water Cleanser
by Marine Easy Clean



Natural Water Cleaning Solution

USERS MANUAL

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What is The Water Cleanser?

In scientific terms, the use of microorganisms to remove pollution is known as "**bioremediation**" and it is the safest way to clean your water. At Marine Easy Clean, we simply call it **"enhancing nature to clean nature".**

The Water Cleanser is a waxy block that acts as a conduit that contains an enriched energy source for beneficial microbes to eat and breed in large numbers. It is usually in block or ball form. Once the microbes dominate the water body they consume organic waste at an accelerated rate.

These microbes are part of an invisible community of bottom dwelling decomposers, which cycle nutrients through the ecosystem. There are many different types of microbes that eat up the organic waster (dead plants, algae, animal waste products) in your water. Unfortunately, most of them need to use oxygen from the water to live. This is why water with a lot of organic pollution can become really low in oxygen, as these aerobic decomposing microbes breed up in large numbers. This causes fish, water plants and other water life to die, creating even more organic waste. The oxygen dependent microbes will also start dying, so waste won't be broken down as quickly. The ecosystem in the water body is then seriously out of balance, your water may smell bad and even wildlife won't go near it. This is what happens when there's no oxygen in the water and lots of organic waste.

Fortunately, the microbes we breed do not require oxygen and otherwise depleted oxygen is returned to the water. The ingredients in TWC are completely organic, and non-toxic. A perfect natural solution.

How to Use

The Water Cleanser speeds up the natural process of decomposition of organic waste. The water becomes cleaner and healthier, and requires less maintenance.

- ◊ Place TWC where the water flow is greatest
- ◊ Make sure the filter inlet is no higher than 25mm/1 inch from bottom of your tank
- ◊ TWC is highly effective with all sponge filters and internal power filters
- ◊ External bio filters should be placed level or below the bottom of the tank
- ◊ When filters are placed higher than the tank, TWC will be less effective, unless there is high water flow and the pickup is no more than 25mm (1 inch) from the bottom of the tank.
- ◊ Hang-on filters are not ideal for use with TWC. You can improve the outcome by placing a sponge over the inlet pipe or changing to an internal sponge filter.
- ◊ With TWC, organic waste will settle on the bottom of the tank. If the filter pick-ups are situated in the middle or top of the tank, the processed waste may build up and look unsightly.
- ◊ Where underwater plants are in pots with slow release fertilisers, the water may not look clear.
- ◊ Once fully working you can have higher stocking density with faster recovery times

Value & Benefits

- ◊ **Greatly reduced maintenance—more time between cleaning filters.**
- ◊ **Enhance filter efficiency**
- ◊ **Less frequent water changes**
- ◊ **Healthier water with fewer fish infections**
- ◊ **Completely natural and environmentally friendly**
- ◊ **Inexpensive to buy**
- ◊ **Saves you on costs and time**
- ◊ **Very easy to use (we have a range of products to suit your aquarium or pond.)**
- ◊ **COMPLETELY SAFE**

Dosage

If under-dosage of The Water Cleanser occurs the product will not be as effective. It is also false economy because healthier water means you spend less on medications, supplements or more fish. You cannot overdose the water with this product.

Please follow the suggested dosage amounts below:

Pond / Tank Size (high flow area)

Size	Litres with Filter	Litres no Filter
1kg	30 000	10 000
400g	5 000	2 000
100g	600	200
1 Ball	200	50

Filters

Internal Power Filters

Efficiency Very Good

Use 1 ball to every 200L and place them into the bottom sponge compartment of the filter.
Internal filters may have 1,2 or 3 compartments, depending on the size of the aquarium.
Use a filter with 3 sponge compartments for best results, but if you use the two compartment type, just chop the bottom sponge in half and place the pieces below it.

Canister Aquarium Filters

Efficiency Very Good

These are great filter systems, but they must be set up below the tank or level with the tank.
Make sure the inlet is no higher than 25mm (1 inch) from the bottom of the tank. Do not have the system higher than the tank as it will be less effective and the water may not be as cleaner.

Internal Sponge Filters

Efficiency Very Good

These filters work well in your pond. Place at the lowest point in your pond.
When cleaning the filter's sponge, squirt it under a hose and squeeze the waster out, then place it straight back into your pond.
Do not dry the sponge as it is full of good bacteria. The pond will go a little murky after cleaning but it should clear within 24 hours.

Hang-On Tank Filter System

Efficiency Not Ideal

The Waster Cleaner is not so effective with these systems, due tot the height of the filter and the lower water flow. If you use this filter system, make sure the water inlet is 25mm from the bottom of the tank and place a sponge over the inlet.

Hints and Tips

Hints & Tips

- For the best results in any pond or aquarium make sure the water is partially to fully shaded, as this helps prevents excessive growth of algae.
- The Water Cleanser works best when it is placed where the water flows the most. (Best in your filter or under the waterfall).
- The Water Cleanser works with all filter systems but it less effective when used in an external “hang on” power filter.
- The Water Cleanser works even better when plants are in the aquarium/pond.
- The Water Cleanser can keep your water looking clear for 6 months or longer with the blocks. However, after 6 months there will be less available food source for the good microbes, and so toxin levels may rise, putting your fish as risk. To Keep toxins under control you should replace The Waster Cleanser as recommended on the packaging.
- Scratch the date onto the block when start using it, so you know when to replace it.
- When starting a new tank it is highly recommended to you at least 50% Active Water. Active Water is where The Water Cleanser has been working fully with fish for over 10 weeks or another body of water (tank) where fish have been living happily. If you can use Active Water your biological filter and water quality will work immediately. This is great in systems with little or no water flow and no filter systems. Make sure the other water source has been treated for chlorine/chloramines and heavy metals, i.e. use a good water conditioner.

Troubleshooting

Can I use this in my saltwater aquarium?

Yes, The Water Cleanser works in both fresh and salt water systems.

Is it safe with my fish?

Yes, completely. In fact you will find that the health of your fish will improve.

My fish are dying?

The Water Cleanser cannot kill fish, it will be another influence. With a new tank it is important that you follow strict rules. There are so many variables for fish dying that you need to seek advice.

My water is clean but the glass is dirty?

You will need to clean your glass from time to time. Friendly microbes consume organic waste at the bottom of the tank and in the filter, but do not form colonies on the walls or in the open water. These microbes don't eat live algae, just waste. Some algae do not require organic matter to survive.

How often do I change the water?

We recommend a 10% water change monthly, but this is subject to the water influences. Without The Water Cleanser you could need to change 8-10 times the amount of water, around 20% weekly.

Why has the algae in the pond gone from green to brown?

This is normal—where algae had been deprived of its organic food source, it dies, turning brown.

It won't fit in my filter.

The balls are designed to fit into a filter , but you can break TWC into a small piece to make it fit. Alternatively, just tie some string onto the block and leave it where the water is flowing strongest.

Do Not – place The Water Cleanser directly under a hot light as it is wax and it will leave an oily residue in your tank. This is not harmful and will disappear in a couple of days.

Troubleshooting Cont.

Why has my water gone a light brown colour?

This is because you are over feeding your fish. High nutrient levels cause overgrowth of algae and cloudiness. Your Water Cleanser is working very hard here and more than likely saving your fish.

Solution – Just lower the amount of food you are feeding the fish on a daily basis and it will clear again once the Water Cleanser has processed the excess organic waste (3 to 4 days). If it has not cleared in that time give the tank a small water change.

My aquarium has gone pink.

If you have an existing disease in your tank, do a 10-20% water change every second day for a least 4 changes. Then monitor the fish and water body. Placing The Water Cleanser in the tank will improve water quality, and better water means healthier fish.

What about my sucker fish that eats algae?

You can still have sucker fish as TWC only stops excess waste at the bottom of the tank. Some algae that only require light to grow, and don't depend on organic matter. This is what your sucker fish will feed on.

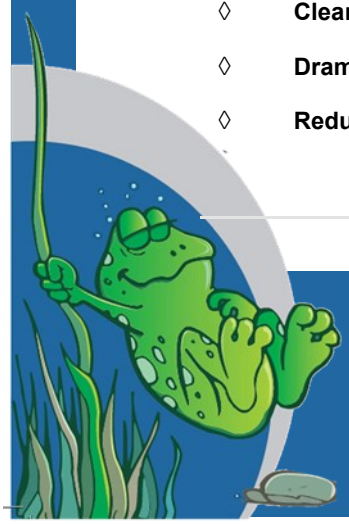
How to use

Organic pollution is constantly being introduced into your pool from leaves, swimmers and other matter.
Organic matter can cause algae and cloudy water. The Water Cleanser helps healthy microbes to breed and decompose organic matter rapidly. Your water will remain healthier and clearer.

- ◊ Suitable for salt and fresh water pools
- ◊ For best results water temperature needs to be under 34ºC
- ◊ Wash the block or balls under running water before use. This will wash off any contaminates that might occur through transport and storage.
- ◊ Place balls or block in skimmer box.
- ◊ Balls sink and the block floats
- ◊ For pools that constantly use an automated vacuum system through the skimmer box, we recommend the use of the balls.
- ◊ For modern pools that using UV lighting, our product will not work. UV kills everything; good and bad.
- ◊ If your pool is cloudy or dirty, we recommend to double the dosage for the first time.
- ◊ **DO NOT** - leave TWC block in direct sunlight when out of water as it will melt! Place the block in the shade whilst cleaning the skimmer box or vacuuming.

Value& Benefits

- ◊ **Clearer Water**
- ◊ **Cleaner, Healthier Water**
- ◊ **Dramatically less chemical use**
- ◊ **Reduces need for cleaning**
- ◊ **Completely natural, safe and environmentally friendly**
- ◊ **Improve the efficiency of your pool pump**
- ◊ **Acts as a natural flocculent**



Dosage

Under dosage is a common misuse of TWC, and the product will not be as effective. You cannot overdose this product.

Please follow the suggested dosage amounts below:

Place either TWC balls or block in Skimmer box, as pictured below. Please note that 1kg blocks can be broken in half.

Pool / Spa Size

Size	Litres with Filter	Replace
14 Ball Pack	Up to 60 000 LT	3 months
1kg Block	Up to 120 000 LT	6 months

Troubleshooting

Which do I use balls or a block?

The balls sink so they sit on the bottom of your skimmer box. This allow maximum water flow around them. We recommend you use the balls when running an automated vacuum system (like a creepy crawly). The balls last 3 months.

The blocks float, and are best for larger pools. For pools under 60 000 litres break the block in half and place in the skimmer box. A 1kg block should last 6 months.

Will the blocks leach any product and is it safe?

Leaching - absolutely not. Safe – completely

Does it stop algae?

Algae requires two elements to survive, sunlight and organic waste. The Water Cleanser starves algae of its food source, organic waste. Therefore in most cases, the algae will disappear. However some algae that stick to pool walls require sunlight only. These will need a little chlorine to remove.

Will it affect my chemical usage?

Yes it will. Testimonials and tests show us on average most pool owners can cut chemical additives significantly and drop down their pump time. Each pool will have a different set of variables. Note that chlorine or other sanitizing method is needed to protect your pool from pathogens such as amoebae or human-borne bacteria which can cause disease. This is absolutely critical in a public pool.

Troubleshooting Cont.

I use an automated vacuum system

The Water Cleanser can still be used when these automated systems are in place. Simply use the balls instead of the 1kg block. If your machine is an independent system not requiring to be in the skimmer box, then you can use the block.

Can I go chemical free?

No. Your pool must have a degree of chemical use, as there are laws governing pool maintenance, that includes mandatory chemical use for the control of diseases. Also, if your pool is completely natural you effectively have a pond. Mother nature will come and inhabit your pool (i.e. frogs and tadpoles). Also some leaf stains and algae require chlorine to eradicate them.

Please read our testimonials to discover the reductions in pump and chemical use achieved.

How often do I need to change The Water Cleanser?

It is imperative that you replace your product as per the timing specified on the packaging, otherwise you will break the breeding cycle of the microbes. The recommended life span is 3 months for the balls and 6 months for the 1kg block.

How to Use

It is important to understand that the Water Cleanser is encouraging the natural environment to improve the water quality. Depending on the existing water quality and unique environmental factors contributing to the pollution, the speed of the results will vary. For example, where there is greater water circulation the product will work faster. Even with less water circulation you should see positive changes within 10 weeks.

This product is designed for organic problems (waste). If your water quality issues are being generated by non-organic chemical influences (i.e. excess fertilizer) then this product will help but not eliminate the problem as fast. This is why we see rapid results in ponds and aquariums, but slower results in dams and lakes. Plant life is helpful to absorb the excess nutrients from fertiliser, but microbes will also break it down eventually. In most cases, chemical introduced by humans are the primary cause of pollution in the ecosystem. For more advice seek our consultancy.

Industrial Blocks

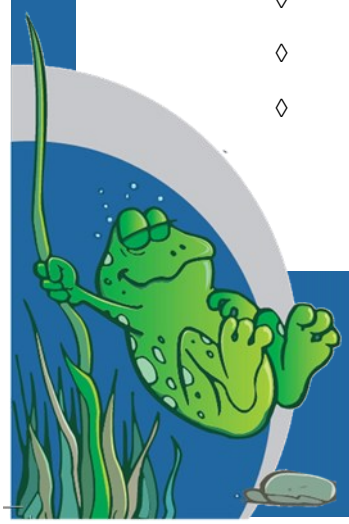
- ◊ Write date on block and your diary to replace in 6 months.
- ◊ For floating blocks— create a hole in the wax block to insert a rope and tie to a weight (i.e. brick). 5kg blocks already have the rope attached.
- ◊ Throw block into water away from the edge. Sinking blocks are weighted so they will sink to the bottom and stand upright.
- ◊ For sinking blocks we recommend for extraction and location that you drill a hole in the block and attached a float system.
- ◊ Ensure that block is away from the water's edge, as it will melt out of the water if the temperature is too warm.
- ◊ Space the block equally in the body of water: recommend 1kg = 100m2.

Septics

- ◊ Diarise replacement for 6 months.
- ◊ Break a small portion of one block (100g) and place in toilet basin.
- ◊ Place one block (1kg) in each tank.

Value & Benefits

- ◊ **Elimination of odour & algal blooms**
- ◊ **Cleaner, healthier water**
- ◊ **Return of aquatic plants and wildlife**
- ◊ **Increased oxygen levels in your**
- ◊ **Restoration of the natural eco-system**
- ◊ **Testing and reporting available**
- ◊ **Full consultation and proposals produced**



Applications

Dams
This is our most commonly used application because it is effective, easy to use and low cost. It also prevents toxic buildup of chemicals in your stock, water and soil, reducing the risk to your business. Just throw the blocks in and wait for results. It can take up to 10 weeks, but first the odour will disappear and then the excess algae.

Septic tanks
As this product thrives on eating organic waste, it is ideal for use in septic tanks. Place a 1kg block in each septic tank. The odour will reduce and the life of your tank will increase.

Agriculture (bore water and spraying)
This product is a natural flocculent and will help settle sediment to the bottom, whilst also reducing the presence of organic waste. The improved water quality reduces clogging in your spraying equipment and improves the quality of your crops.

Troughs
We have horse and livestock owners that use this product in the water tank that supplies water to the troughs. The Water Cleanser ensures that the water provided is always healthy and clear.

Lakes
Returning the ecosystem is the cornerstone to a healthy lake or river– see case studies for further information.

Sewerage Treatment Plants
As TWC encourages microorganisms to decompose organic matter, it is very effective in Sewage Treatment Plants. See our website for further information.

Dosage

If under-dosage of The Water Cleanser occurs the product will not be as effective. You cannot over-dose this product.

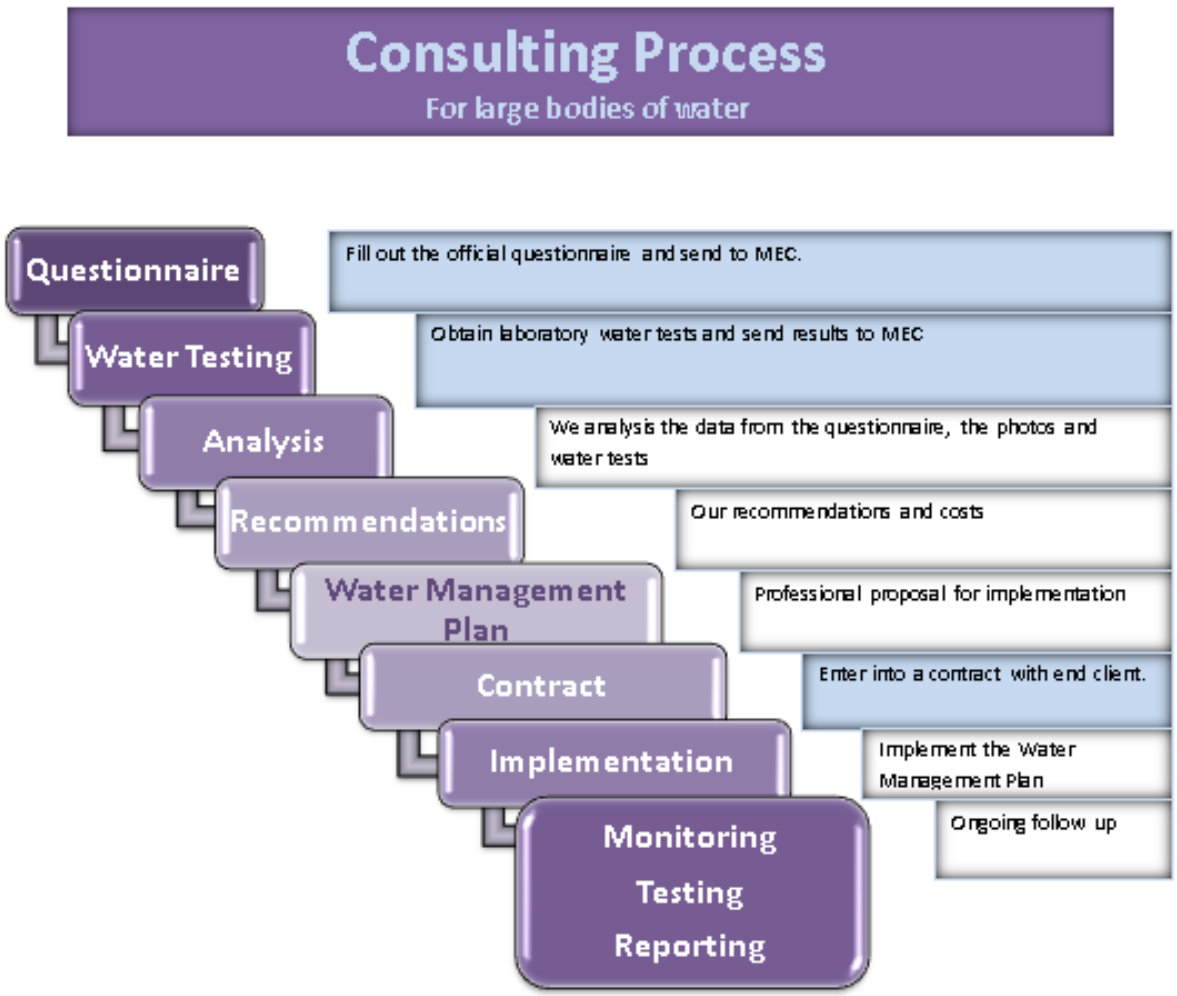
A simple method to calculate dosage amounts is to use 1kg per 100m2. Note this is based on the surface area of the water, not the volume. However, commercial or industrial applications, the dosage may have to be adjusted to compensate for additional factors such as poor water quality, limited water flow and existing chemical contamination.

Testing of the water is recommended so a more tailored approach can be given. Marine Easy Clean offers a consulting service to help you use The Water Cleanser in your specific location and situation.

Consulting Service

There are several factors that can effect the efficiency of The Water Cleanser within Industrial and Commercial Applications. These include, but are not limited to: water quality, weather, waterflow, existing chemicals contamination.

To help you obtain the most from our product, we offer a consulting service tailored to your specific situation. Our methods and products will help provide environmentally friendly solutions for your water system.



For more information contact us on: sales@twca.net.au

Troubleshooting

How long will it take to work?

In stagnant water the process will take longer—up to 10 weeks. Also existing water quality affects the speed of results. In filtered or moving water results are seen much earlier. The first thing you will notice is a reduction in odour.

The product does not seems to be working

1. This product is an natural solution to organic pollution. If you have chemical contamination you may require other action. Contact us to discuss your options.
2. You must replace the blocks as directed. Otherwise you will break the breeding cycle and your water quality will return to its original state.
3. Often this product works best with fish and plants in the water. The breakdown of fish waste and organic waste releases nutrients into the water. Plants in the water can absorb these excess nutrients, improving the quality of the water. Plants can also absorb metal ions that are toxic to fish and other life.

How much product do I need?

The simple solution is 1kg per 100m2; however we may increase the dosage depending on the water quality, water flow and desired speed of result.

You cannot overdose the water with this product.

How does the Water Cleanser affect pH and other chemicals?

Please read the Technical information on our website for the results of projects and testing, but The Water Cleanser does not effect pH.

Troubleshooting Cont.

How safe is the product?

TWC is completely safe to all forms of life. Nothing is being released into the water. The APVMA has approved this product and does not require registration under the Act.

Does it stop algae?

Yes it stops excessive algal growth. Excess nutrients in the water from organic waste can encourage overgrowth of algae, including algal blooms. TWC accelerates proliferation of friendly microbes that consume organic waste. Massive algal blooms require a lot of nutrients—with the waste diminished, the algae starves.

When won't the Water Cleanser stop algae growth?

When there is another nutrient source that is not organic water. Fertiliser is the most common culprit.

The chemicals in fertilizer provide food for plants and algae, so if fertilizer is continually leaching into the water, algae will continue to grow. In a domestic setting, bore water commonly has a high level of minerals in it. Or it could be coming from runoff from your garden.

The good news is that TWC causes a massive reduction in organic pollution, so usually over time, this food source for the algae will be used up and the algae will die. This can take up to 10 weeks but in extreme circumstances much longer.

If you use antibiotics in your pond, water , this could also cause excess algae in your pond that TWC will not stop.

Why has the algae in the pond gone from green to brown?

It's dying. TWC hasn't killed it. The algae is just running out of food (from organic waste). This is a good sign that your water is no its way to recover. It means that friendly microbes are hard at work

WESTERN AUSTRALIA Innovator of the Year 2011 FINALIST

The Water Cleanser by
Marine Easy Clean

Providing an innovative way to naturally solve water problems. Suitable for all contained bodies of water - salt and fresh water
The Water Cleanser enhances nature to improve nature.

22 Tichborne Street,

Cockburn Central,

Western Australia 6164

Tel:+61 8 9414 1159

Fax: +61 8 9414 1922

sales@twca.net.au

www.thewatercleanser.com.au